

#2

OIPE

RAW SEQUENCE LISTING DATE: 08/10/2001
PATENT APPLICATION: US/09/919,197 TIME: 08:04:44

Input Set : A:\ISPH-593_Seq_ASCII.txt
Output Set: N:\CRF3\08102001\I919197.raw

3 <110> APPLICANT: Rosanne M. Crooke
4 Mark J. Graham
7 <120> TITLE OF INVENTION: ANTISENSE MODULATION OF SHORT HETERODIMER PARTNER-1
EXPRESSION
9 <130> FILE REFERENCE: ISPH-0593
C--> 11 <140> CURRENT APPLICATION NUMBER: US/09/919,197
C--> 11 <141> CURRENT FILING DATE: 2001-07-31
11 <160> NUMBER OF SEQ ID NOS: 89
13 <170> SOFTWARE: FastSEQ for Windows Version 4.0
15 <210> SEQ ID NO: 1
16 <211> LENGTH: 20
17 <212> TYPE: DNA
18 <213> ORGANISM: Artificial Sequence ✓
20 <220> FEATURE:
21 <223> OTHER INFORMATION: Antisense Oligonucleotide ✓
23 <400> SEQUENCE: 1
24 tccgtcatcg ctcctcaggg 20
26 <210> SEQ ID NO: 2
27 <211> LENGTH: 20
28 <212> TYPE: DNA
29 <213> ORGANISM: Artificial Sequence ✓
31 <220> FEATURE:
32 <223> OTHER INFORMATION: Antisense Oligonucleotide ✓
34 <400> SEQUENCE: 2
35 atgcattctg ccccaagaga 20
37 <210> SEQ ID NO: 3
38 <211> LENGTH: 1456
39 <212> TYPE: DNA
40 <213> ORGANISM: Homo sapiens
42 <220> FEATURE:
43 <221> NAME/KEY: exon
44 <222> LOCATION: (1)...(531)
46 <221> NAME/KEY: intron
47 <222> LOCATION: (532)...(849)
49 <221> NAME/KEY: exon
50 <222> LOCATION: (850)...(1091)
52 <221> NAME/KEY: polyA_signal
53 <222> LOCATION: (1428)...(1433)
55 <400> SEQUENCE: 3
56 tgagcaccag ccaaccagg gcctgccat gccaggagc tgcaagccgc cccgcccattc 60
57 tctacgact tctgagctcc agcctcaagg ctgtcccccg accccgttagc cgctgcctat 120
58 gttaggcagca ccggcccggtc cagctatgtg cacctcatacg cacctgccgg gaggccttgg 180
59 atgttctggc caagacagtgc gccttctca ggaacctgcc atccttctgg cagctgcctc 240
60 cccaggacca gccggcggctg ctgcagggtt gctggggccc cctttctgtt cttgggttgg 300
61 cccaaatgc tgtgacctt gaggtggctg aggccccgtt gcccagcata ctcaagaaga 360
62 ttctgttggc ggagcccgac agcagtggag gcagtggcca actgccagac agaccccgac 420
63 cctccctggc tgcgggtgcag tggcttcaat gctgtcttgg gtccttctgg agcctggagc 480
64 ttagccccaa ggaatatatgcc tgcctgaaaag ggaccatctt cttcaacccc gataaagaaa 540

ENTERED

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65 ctgaagccca gagattaagt gacttgccca aggtcaccca gctaataagt gacagtgcg 600
66 ggattcatac ccaggaagcc taattcttaa ccattactcc acactgcctc ttcataaaatg 660
67 gatggatgaa tacattgaaa attgataaaat aaattacctc ctctaaagga ggaggtagta 720
68 gtgggacctc aaaggccgag caaaggaggg agaggggtgt ctctgatgcc ccagatctt 780
69 ggcagtcctt gtccttttgtt ggctgggagt aggggtctca ccagccctct tctccctctc 840
70 tgcccacaga tgcgcaggc ctccaaagccg cctccacat tgggcacccg cagcaggagg 900
71 ctcaactgggt gctgtgtgaa gtccttggaa cctgggccc agcagccccaa ggccgcctga 960
72 cccgtgtcct ctcacggcc tccaccctca agtccattcc gaccagccg cttggggacc 1020
73 tcttcttcg ccctatcatt ggagatgttg acatcgctgg ctttcttgg gacatgcttt 1080
74 tgctcagggt acctgttcca gcccaggcag agatcagggt ggcagaggct ggcagtgcg 1140
75 attcagcctg gccatccccca gaggtgaccg aatgctcctg gaggggcaag cctgtataga 1200
76 cagcacttgg ctcccttagga acagcttcc actcagccac accccacatt ggacttcctt 1260
77 ggtttggaca cagtgcctca gctgcctgg aggctttgg tggccccac agcctctggg 1320
78 ccaagactcc tgccttctc tggatgaga atgaaagctt aggctgctta ttggaccaga 1380
79 agtccatatcg actttataca gaactgaatt aagttattga tttttaat aaaaggtatg 1440
80 aaacactaaa aaaaaaa 1456
82 <210> SEQ ID NO: 4
83 <211> LENGTH: 20
84 <212> TYPE: DNA
85 <213> ORGANISM: Artificial Sequence ✓
87 <220> FEATURE:
88 <223> OTHER INFORMATION: PCR Primer ✓
90 <400> SEQUENCE: 4
91 gctatgtgca cctcatcgca 20
93 <210> SEQ ID NO: 5
94 <211> LENGTH: 20
95 <212> TYPE: DNA
96 <213> ORGANISM: Artificial Sequence ✓
98 <220> FEATURE:
99 <223> OTHER INFORMATION: PCR Primer ✓
101 <400> SEQUENCE: 5
102 gaggaaggcc actgtcttgg 20
104 <210> SEQ ID NO: 6
105 <211> LENGTH: 22
106 <212> TYPE: DNA
107 <213> ORGANISM: Artificial Sequence ✓
109 <220> FEATURE:
110 <223> OTHER INFORMATION: PCR Probe ✓
112 <400> SEQUENCE: 6
113 ctgccgggag gccttggatg tt 22
115 <210> SEQ ID NO: 7
116 <211> LENGTH: 19
117 <212> TYPE: DNA
118 <213> ORGANISM: Artificial Sequence ✓
120 <220> FEATURE:
121 <223> OTHER INFORMATION: PCR Primer ✓
123 <400> SEQUENCE: 7
124 gaaggtgaag gtcggagtc 19
126 <210> SEQ ID NO: 8

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127 <211> LENGTH: 20
128 <212> TYPE: DNA
129 <213> ORGANISM: Artificial Sequence
131 <220> FEATURE:
132 <223> OTHER INFORMATION: PCR Primer
134 <400> SEQUENCE: 8
135 gaagatggtg atgggatttc 20
137 <210> SEQ ID NO: 9
138 <211> LENGTH: 20
139 <212> TYPE: DNA
140 <213> ORGANISM: Artificial Sequence
142 <220> FEATURE:
143 <223> OTHER INFORMATION: PCR Probe
145 <400> SEQUENCE: 9
146 caagcttccc gttctcagcc 20
148 <210> SEQ ID NO: 10
149 <211> LENGTH: 1119
150 <212> TYPE: DNA
151 <213> ORGANISM: Mus musculus
153 <220> FEATURE:
154 <221> NAME/KEY: CDS
155 <222> LOCATION: (33)...(815)
157 <400> SEQUENCE: 10
158 agctggaaag aaacaggaac aagataactaa cc atg agc tcc ggc cag tca ggg 53
159 Met Ser Ser Gly Gln Ser Gly
160 1 5
162 gtc tgc cca tgc cag ggc tct gca ggt cgt ccg act att ctg tat gca 101
163 Val Cys Pro Cys Gln Gly Ser Ala Gly Arg Pro Thr Ile Leu Tyr Ala
164 10 15 20
166 ctt ctg agc ccc agc acc agg ccc gtt gca cct gca tct cac 149
167 Leu Leu Ser Pro Ser Pro Arg Thr Arg Pro Val Ala Pro Ala Ser His
168 25 30 35
170 agc cac tgc ctg tgc cag cag cag cgg cct gtg cgt ctg tgt gct ccg 197
171 Ser His Cys Leu Cys Gln Gln Arg Pro Val Arg Leu Cys Ala Pro
172 40 45 50 55
174 cac cgc acc tgc agg gag gcc ttg gat gtc cta gcc aag aca gta gcc 245
175 His Arg Thr Cys Arg Glu Ala Leu Asp Val Leu Ala Lys Thr Val Ala
176 60 65 70
178 ttc ctc agg aac ctg ccg tcc ttc tgc cac ctg ccc cat gag gat gag 293
179 Phe Leu Arg Asn Leu Pro Ser Phe Cys His Leu Pro His Glu Asp Gln
180 75 80 85
182 cgg cgg ctg cta gag tgc tgc tgg ggc cct ctc ttc ctg ctt ggg ttg 341
183 Arg Arg Leu Leu Glu Cys Cys Trp Gly Pro Leu Phe Leu Leu Gly Leu
184 90 95 100
186 gcc cag gat gct gtg acc ttc gag gtg gct gag gct ccg gtg ccc agt 389
187 Ala Gln Asp Ala Val Thr Phe Glu Val Ala Glu Ala Pro Val Pro Ser
188 105 110 115
190 ata ctt aag aag atc ctg cta gag gaa gcc agc agc ggt acc cag ggt 437
191 Ile Leu Lys Ile Leu Leu Glu Ala Ser Ser Gly Thr Gln Gly

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192	120	125	130	135		
194	gcc cag cca tca gac cg	cca caa ccc tca ctg	gct gca gtt cag tgg	485		
195	Ala Gln Pro Ser Asp Arg	Pro Gln Pro Ser Leu Ala Ala Val Gln Trp				
196	140	145	150			
198	ctg cag cgc tgc ctg gag	tct ttc tgg agc ctt gag ctg	ggt ccc aag	533		
199	Leu Gln Arg Cys Leu Glu	Ser Phe Trp Ser Leu Glu Leu Gly Pro Lys				
200	155	160	165			
202	gag tat gcg tac ctg aag ggc acg atc ctc ttc aac cca	gat gtg cca		581		
203	Glu Tyr Ala Tyr Leu Lys Gly Thr Ile Leu Phe Asn Pro Asp Val Pro					
204	170	175	180			
206	ggc ctc cgt gcc tcc tgc cac atc gca cac	ctg caa cag gag	gct cac	629		
207	Gly Leu Arg Ala Ser Cys His Ile Ala His	Leu Gln Gln Glu Ala His				
208	185	190	195			
210	tgg gca ctg tgt gaa gtc ttg gag	ccc tgg tac cca gcc	agc caa ggc	677		
211	Trp Ala Leu Cys Glu Val Leu Glu Pro Trp	Tyr Pro Ala Ser Gln Gly				
212	200	205	210	215		
214	cgc ctg gcc cga atc ctc ctc atg	gcc tct acc ctc aag aac	att cca	725		
215	Arg Leu Ala Arg Ile Leu Leu Met Ala Ser Thr Leu Lys Asn Ile Pro					
216	220	225	230			
218	ggc acc ctt ctg gta gat ctc ttc ctc	cgc cct atc atg	gga gac gtt	773		
219	Gly Thr Leu Leu Val Asp Leu Phe Phe Arg Pro Ile Met Gly Asp Val					
220	235	240	245			
222	gac atc act gaa ctc ctt gaa gac atg	ctt ttg ctg agg	tga	815		
223	Asp Ile Thr Glu Leu Leu Glu Asp Met Leu Leu Leu Arg					
224	250	255	260			
226	ccccgtggaaat ggagctctgg	ggctccaaag gggaggctga	aaggcagccc tcaactcccc	875		
227	tggagctgcc ctcagctcag	ccacacccct agctcggact	tccttgcttt ggatacagtg	935		
228	tacactacta actgtccagc	aagcccttga tgactccccca	aacctccagg cccaaaatgtc	995		
229	tttccctgcc tggtaggga	tgggagcagg aagctgtact	ttcaagccag aatccctcct	1055		
230	gactttgtac agaactaaat	taagttattt	tttttgtaa taaaacatat	gaccctcctga	1115	
231	aaaa				1119	
233	<210> SEQ ID NO: 11					
234	<211> LENGTH: 19					
235	<212> TYPE: DNA					
236	<213> ORGANISM: Artificial Sequence ✓					
238	<220> FEATURE:					
239	<223> OTHER INFORMATION: PCR Primer ✓					
241	<400> SEQUENCE: 11					
242	ctcctggcac atcgcacac				19	
244	<210> SEQ ID NO: 12					
245	<211> LENGTH: 20					
246	<212> TYPE: DNA					
247	<213> ORGANISM: Artificial Sequence ✓					
249	<220> FEATURE:					
250	<223> OTHER INFORMATION: PCR Primer ✓					
252	<400> SEQUENCE: 12					
253	accagggctc caagacttca				20	
255	<210> SEQ ID NO: 13					
256	<211> LENGTH: 25					

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257 <212> TYPE: DNA
258 <213> ORGANISM: Artificial Sequence ✓
260 <220> FEATURE:
261 <223> OTHER INFORMATION: PCR Probe ✓
263 <400> SEQUENCE: 13
264 caacaggagg ctcactgggc actgt 25
266 <210> SEQ ID NO: 14
267 <211> LENGTH: 20
268 <212> TYPE: DNA
269 <213> ORGANISM: Artificial Sequence ✓
271 <220> FEATURE:
272 <223> OTHER INFORMATION: PCR Primer ✓
274 <400> SEQUENCE: 14
275 ggcaaattca acggcacagt 20
277 <210> SEQ ID NO: 15
278 <211> LENGTH: 20
279 <212> TYPE: DNA
280 <213> ORGANISM: Artificial Sequence ✓
282 <220> FEATURE:
283 <223> OTHER INFORMATION: PCR Primer ✓
285 <400> SEQUENCE: 15
286 gggtctcgct cctggaaagat 20
288 <210> SEQ ID NO: 16
289 <211> LENGTH: 27
290 <212> TYPE: DNA
291 <213> ORGANISM: Artificial Sequence ✓
293 <220> FEATURE:
294 <223> OTHER INFORMATION: PCR Probe ✓
296 <400> SEQUENCE: 16
297 aaggccgaga atggaaagct tgtcatc 27
299 <210> SEQ ID NO: 17
300 <211> LENGTH: 20
301 <212> TYPE: DNA
302 <213> ORGANISM: Artificial Sequence ✓
304 <220> FEATURE:
305 <223> OTHER INFORMATION: Antisense Oligonucleotide ✓
307 <400> SEQUENCE: 17
308 ccctgggtgg ctggtgctca 20
310 <210> SEQ ID NO: 18
311 <211> LENGTH: 20
312 <212> TYPE: DNA
313 <213> ORGANISM: Artificial Sequence ✓
315 <220> FEATURE:
316 <223> OTHER INFORMATION: Antisense Oligonucleotide ✓
318 <400> SEQUENCE: 18
319 gcttgcagct ccctggcatg 20
321 <210> SEQ ID NO: 19
322 <211> LENGTH: 20
323 <212> TYPE: DNA

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VERIFICATION SUMMARY

PATENT APPLICATION: US/09/919,197

DATE: 08/10/2001

TIME: 08:04:45

Input Set : A:\ISPH-593_Seq_ASCII.txt
Output Set: N:\CRF3\08102001\I919197.raw

L:11 M:270 C: Current Application Number differs, Replaced Current Application No

L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date